

# Screening for falls risk in the older person with haemophilia – a pilot study

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**Introduction and objectives:** Objective, repeatable, and reproducible screening tools for assessing falls risk is required. To date, no prospective study has been published on people with haemophilia that permits selection of a specific test of balance and gait, nor is there adequate validation of cut-off scores for any of the tests for identification of future falls in people with haemophilia. Our aim was firstly to see whether an association exists between Haemophilia Joint Health Score (HJHS) and a history of falls and secondly, to see whether objective tests of balance and gait are associated with a history of falls. **Methods and materials:** In a pilot study of ten people with severe haemophilia we evaluated balance in the clinical setting with the Berg Balance Scale (BBS), Timed up and Go (TUG) and 2-Minute Walk Test (2MWT), and in the laboratory setting by recording the pressure patterns under the feet (postural sway) when the individual sensory inputs required for balance were challenged. **Results:** All participants were fearful of falling in the future and eight had fallen in the previous year. Higher HJHS scores were found in the fallers (F) when compared to the non-fallers (NF) and scores were moderately related to lower performance of the BBS. But F and NF were considered at low risk of falling using the standardised BBS cut-off scores. Fallers took longer to complete the TUG and walked less in 2 minutes when compared to NF. Postural sway reduced up to ten-fold in the in F when visual input was removed and proprioceptive function was challenged. Moderately strong associations were found between TUG, 2MWT and BBS. **Conclusions:** Screening for falls risk in the older person with haemophilia should be more sophisticated than simply asking “Did you fall in the last year?” Reduced postural sway ability indicates impaired ability to cope with challenges to balance and suggests a higher risk of falling. Current cut-offs of standardised tests may be insufficient to identify those at risk of falling. However, objective clinical tests like the TUG and 2MWT may be suitable to identify and monitor falls risk in people with haemophilia.